

AMENDMENTS TO THE CLAIMS**Listing of Claims**

This listing of the claims will replace all prior versions, and listings, of claims in this application.

1. **(Currently Amended)** An isolated ~~DH-PH tandem domain~~ nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of
 - (a) the nucleotide sequence of SEQ ID NO:1; derived from the Ect 2 sequence and having the sequence as set out in DNA sequence 1 (SEQ ID NO:1).
 - (b) a nucleotide sequence of at least 70% identity to the entire nucleotide sequence of SEQ ID NO:1;
 - (c) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:3;
 - (d) a nucleotide sequence encoding an amino acid sequence of at least 80% identity to the entire amino acid sequence of SEQ ID NO:3; and
 - (e) a nucleotide sequence encoding a fragment of at least 5 contiguous amino acids of the amino acid sequence of SEQ ID NO:3.
2. **(Currently Amended)** ~~[[An]]The isolated nucleic acid molecule domain as claimed in of~~ claim 1 having a specificity for PtdIns3P, PtdIns5P or PtdIns3,5P₂.
3. **(Currently Amended)** A method of screening for agents that modulate the interaction of ~~[[the]]an Ect 2 [[PH]] Pleckstrin homology domain with a [[PIs]]phosphoinosite, comprising incubating a polypeptide comprising the Ect 2 [[PH]] Pleckstrin homology domain polypeptide and said [[PI]] phosphoinosite with a candidate agent under conditions conducive for binding and determining whether said candidate agent modulates the binding of the Ect 2 [[PH]] Pleckstrin homology domain with the [[PI]] phosphoinosite.~~
4. **(Currently Amended)** ~~[[A]]The method as claimed in of claim 3 wherein the [[PI]] phosphoinosite is a PI having~~ has a phosphate group at the 3 and/or 5 position.
5. **(Currently Amended)** ~~[[A]]The method as claimed in of claim[[s]] 3 [[or 4]] wherein said agent is an antibody, a small organic molecule or a nucleic acid molecule.~~

6. **(Currently Amended)** ~~[[A]] The method as claimed in any of claim[[s]] 3 [[to 5]] wherein the [[PH]] Pleckstrin homology domain is provided as part of the construct having a sequence as set out in DNA sequence 1 (SEQ ID NO:1) encoded by a nucleic acid molecule selected from the group consisting of:~~
- ~~(a) the nucleotide sequence of SEQ ID NO:1;~~
 - ~~(b) a nucleotide sequence of at least 70% identity to the entire nucleotide sequence of SEQ ID NO:1;~~
 - ~~(c) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:3;~~
 - ~~(d) a nucleotide sequence encoding an amino acid sequence of at least 80% identity to the entire amino acid sequence of SEQ ID NO:3; and~~
 - ~~(e) a nucleotide sequence encoding a fragment of at least 5 contiguous amino acids of the amino acid sequence of SEQ ID NO:3.~~
7. **(Currently Amended)** A method of identifying an agent that modulates the cell cycle activity of Ect 2, the method comprising:
- (a) providing a sample ~~containing~~ comprising a polypeptide comprising an Ect 2 ~~[[PH]] Pleckstrin homology domain~~, and a candidate agent;
 - (b) measuring the binding of the polypeptide comprising ~~[[an]]the Ect 2 [[PH]] Pleckstrin homology domain~~ to the candidate agent in the sample; and
 - (c) comparing the binding of the polypeptide comprising ~~[[an]]the Ect 2 [[PH]] Pleckstrin homology domain~~ to the candidate agent in the sample with the binding of the polypeptide comprising ~~[[an]]the Ect 2 [[PH]] Pleckstrin homology domain~~ to a control agent, ~~wherein the control agent is known to not bind to the polypeptide comprising an Ect 2 PH domain;~~
- wherein an increase in the binding of the polypeptide comprising ~~[[an]]the Ect 2 [[PH]] Pleckstrin homology domain~~ to the candidate agent in the sample relative to the binding of the polypeptide comprising ~~[[an]]the Ect 2 [[PH]] Pleckstrin homology domain~~ to the control agent indicates that the candidate agent modulates the cell cycle function of Ect 2.

8. **(Currently Amended)** ~~The use of a polypeptide capable of binding to PIs having a 3 and/or 5 phosphate group but not capable of binding to a PI having a 4 phosphate group in a screening~~ A method for identifying a compound suitable for that modulates[[ing]] signalling by a [[PI]] phosphoinosite having a 3 and/or 5 phosphate group comprising contacting a polypeptide which binds to the phosphoinosite but which does not bind to a phosphoinosite having a 4 phosphate group with the phosphoinosite and a candidate agent under conditions conducive for binding and determining the ability of the polypeptide to modulate signalling by the phosphoinosite.
9. **(Currently Amended)** ~~A use as claimed in~~ The method of claim 8 wherein the polypeptide comprises an Ect 2 [[PH]] Pleckstrin homology domain.
10. **(New)** The method of claim 4 wherein said agent is an antibody, a small organic molecule or a nucleic acid molecule.
11. **(New)** The method of claim 3, wherein the polypeptide comprising the Ect 2 Pleckstrin homology domain comprises an amino acid sequence selected from the group consisting of:
- (a) the amino acid sequence of SEQ ID NO:3;
 - (b) an amino acid sequence of at least 80% identity to the entire amino acid sequence of SEQ ID NO:3;
 - (c) an amino acid sequence encoded by a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1;
 - (d) an amino acid sequence encoded by a nucleic acid molecule comprising a nucleotide sequence of at least 70% identity to the entire nucleotide sequence of SEQ ID NO:1;
 - (e) an amino acid sequence of at least 5 contiguous amino acids of the amino amino acid sequence of SEQ ID NO:2.
12. **(New)** The method of claim 7, wherein the polypeptide comprising the Ect 2 Pleckstrin homology domain comprises an amino acid sequence selected from the group consisting of:
- (a) the amino acid sequence of SEQ ID NO:3;
 - (b) an amino acid sequence of at least 80% identity to the entire amino acid sequence of SEQ ID NO:3;

- (c) an amino acid sequence encoded by a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1;
- (d) an amino acid sequence encoded by a nucleic acid molecule comprising a nucleotide sequence of at least 70% identity to the entire nucleotide sequence of SEQ ID NO:1;
- (e) an amino acid sequence of at least 5 contiguous amino acids of the amino amino acid sequence of SEQ ID NO:2.

13. (New) The method of claim 9, wherein the polypeptide comprising the Ect 2 Pleckstrin homology domain comprises an amino acid sequence selected from the group consisting of:

- (a) the amino acid sequence of SEQ ID NO:3;
- (b) an amino acid sequence of at least 80% identity to the entire amino acid sequence of SEQ ID NO:3;
- (c) an amino acid sequence encoded by a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1;
- (d) an amino acid sequence encoded by a nucleic acid molecule comprising a nucleotide sequence of at least 70% identity to the entire nucleotide sequence of SEQ ID NO:1;
- (e) an amino acid sequence of at least 5 contiguous amino acids of the amino amino acid sequence of SEQ ID NO:2.

14. (New) An isolated polypeptide comprising an amino acid sequence selected from the group consisting of

- (a) the amino acid sequence of SEQ ID NO:3;
- (b) an amino acid sequence of at least 80% identity to the entire amino acid sequence of SEQ ID NO:3;
- (c) an amino acid sequence encoded by a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1;
- (d) an amino acid sequence encoded by a nucleic acid molecule comprising a nucleotide sequence of at least 70% identity to the entire nucleotide sequence of SEQ ID NO:1;
- (e) an amino acid sequence of at least 5 contiguous amino acids of the amino amino acid sequence of SEQ ID NO:2.